KELLER AND HECKMAN LLP
Serving Business through Law and Science®

1001 G Street, N.W.
Suite 500 West
Washington, D.C. 20001
tel. 202.434.4100
fax 202.434.4646

Writer's Direct Access
Douglas Jarrett
(202) 434-4180
jarrett@khlaw.com

November 26, 2019

Via Electronic Filing

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 - 12th Street, S.W.
Washington, D.C. 20554

Re: WT Docket No. 17-200

Dear Ms. Dortch:

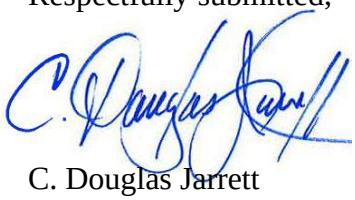
On November 25, 2019, Sara Banaszak of Exxon Mobil, Misty McGowen of Phillips 66, Dave Herdman and Craig Stone of Phillips 66 (via telephone), and the undersigned, on behalf of the Ad Hoc Refiners Group, met with Roger Noel, Lloyd Coward, Amanda Huetnick, Jessica Quinley, Moslem Sawez, and Jaclyn Rosen of the Wireless Telecommunications Bureau, setting out the Refiners interests and positions in the referenced proceeding per the enclosed PowerPoint presentation.

The presentation was supported by the attached spreadsheet and a summary thereof. These documents set out the number of site-based 900 MHz channels that could be coordinated for seven major refining complexes located in the Houston MTA if a 3 x 3 MHz broadband channel were established in the Houston MTA, with and without a guardband isolating the narrowband channels from the 3 x 3 MHz broadband channel. In addition, the Refiners' representatives highlighted the importance of the Houston-Gulf Coast for energy industry expansion over the next decade, as outlined in the Ad Hoc Refiners Group's Reply Comments filed on July 1, 2019, in this proceeding.

The role of the ExxonMobil Beaumont Refinery staff in restoring water service to residents of Beaumont in the wake of Hurricane Harvey and importance of this refinery's 900 MHz narrowband voice system in this effort were discussed. A map of the Phillips 66 major facilities, showing the concentration of facilities in the Houston-Gulf Coast area, and in other metropolitan areas, including greater Los Angeles and New York, was also provided.

Should there be any questions regarding the Refiners' positions, interests and proposals, the Commission is requested to contact the undersigned, preferably by telephone.

Respectfully submitted,



C. Douglas Jarrett

Attachments

cc: Roger Noel (Via Email)
Lloyd Coward
Amanda Huetinck
Jessica Quinley
Moslem Sawez
Jaclyn Rosen

4842-1732-9838, v. 1

Review of the Commission's Rules Governing the 896-901/935-940 MHz Band
WT Docket No. 17-200
Ad Hoc Refiners Group
Ex Parte Presentation
November 25, 2019

Refiners' Interest in 900 MHz Narrowband Systems

- 900 MHz is PLMRS "band of last resort"
- Safety/Environmental Stewardship
- Industry Expansion in Houston, Gulf Coast
- Reliability

900 MHz Band Should Support Multiple Users for Long Term

Anterix is looking to lease 3 x 3 channels to 1 or 2 entities per market; it has no intention of building networks and providing service to multiple critical infrastructure firms

Commission's statutory obligation to promote the "safety of life and property through the use of wire and radio communications" extends to all 900 MHz licensees

Critical Infrastructure licensees of large 900 MHz NB systems should have sufficient spectrum to meet their requirements not only for 2020 but for the next decade

Refiners' Advanced Wireless Broadband Requirements

3 x 3 MHz or 1.4 x 1.4 MHz 900 MHz LTE networks **do not** offer required speed, latency or capacity to support Digital Refinery of the Future

5G including CBRS has the potential to support Digital Refinery of the Future

- Higher data rates and dramatically better latency
- Carriers touting 5G "Slices" to support virtual private networks at major industrial facilities and complexes

A 900 MHz Guard Band Should Be Fully Assessed

Record is replete with data and studies showing that a guard band separating 900 MHz NB and 900 MHz broadband operations is necessary to prevent harmful interference to 900 MHz NB operations

- Leading LMR manufacturer and reputable consultants have set out detailed studies demonstrating a high probability of harmful interference from broadband operations into narrowband 900 MHz operations

The potential for such interference is an important consideration that the Commission should address through testing

- "[A]n agency's failure to respond to relevant and significant public comments generally demonstrates that the agency's decision was not based on a consideration of the relevant factors." *Mozilla v. FCC*, No. 18-1051, slip. op. at p. 93 (D.C. Cir. Oct. 1, 2019).

Refiners' Proposals

1. Conduct testing to determine whether guard band(s) between 900 MHz broadband operations and adjacent 900 MHz NB operations is/are or not necessary for maintaining reliable 900 MHz NB operations
   - Conduct tests and assess results ***before, not after*** relocation

2. Establish a "NB Channel Reserve" = 20 NB channels post 900 MHz relocation in Houston and other major 900 MHz markets such as Los Angeles/Riverside

Summary and Introduction

The Refiners retained ACD Telecom to conduct frequency searches of available 900 MHz frequencies that could be assigned to existing licensed ExxonMobil, Phillips 66, and Blanchard Refining (Marathon Petroleum Company) 900 MHz locations in the Houston MTA based on a 70-mile (113 km) standard co-channel distance separation. The currently assigned site-based and area-wide licenses assessed for these refinery locations are depicted in the Excel spreadsheet with Tabs for each call sign. ACD conducted the search using Spectrum Watch software.[1]

The tables below depict the number of site-based channels that ***are not*** assigned within a 70-mile (113 km) radius of the selected refineries 900 MHz systems, all of which are located in the Houston MTA.[2] For example, the numbers for Baytown disclose that Anterix holds 46 site-based channels (plus 200 area-wide channels in the Houston MTA) and 4 other site-based channels are not assigned. All other site-based licenses are assigned. Thus, assuming Anterix is assigned 240 contiguous channels for a 3 x 3 MHz broadband channel, 10 channels will remain available for narrowband operations for the foreseeable future. This is a low number for the current and projected level and nature of economic activity in the Houston MTA.

Were the Commission to adopt guard bands totaling .5 MHz (thirty (30) 900 MHz NB channels) to prevent interference from 3 x 3 MHz broadband operations to 900 MHz Narrowband (NB) systems, there would be a ***shortfall*** of available site-based channels at these locations. That is, currently licensed narrowband 900 MHz channels would have to be surrendered to implement a 3 x 3 MHz channel block.

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[1] ACD Telecom has performed frequency coordination in the United States and its territories since 1998. As part of its frequency coordination process, ACD Telecom conducts co-channel analyses, adjacent channel analyses, formulates PCN letters, and cross coordinates with other frequency coordinators. ACD Telecom utilizes the SpectrumWatch software program and database in conducting these analyses.

[2] As noted during the ex parte discussion, the lists are representative of data available in the ULS database as uploaded through SpectrumWatch software. One channel attributed to ExxonMobil on the spreadsheet is not currently licensed to ExxonMobil.

Site-Based, Narrowband Frequency Analysis Results

Beaumont Sites [3]

WPLP694 – Location 1
- 3 x 3 MHz (240)
  - PDV Area–Wide 200
  - PDV Site-Based: 14
  - Canceled Channels: 22
- Unassigned: 2
- Not Fixed: 4 (ONCOR)
- Remaining Assignable: 2
- ***Assignable w/ Guard band: -28***

WRAK385 – Location 6
- 3 x 3 MHz (240)
  - PDV Area–Wide 200
  - PDV: Site-based 24
  - Canceled Licenses: 23
- Not Fixed: 25 (22 ONCOR)
- Unassigned: 11
- Remaining Assignable: 53
- ***Assignable w/ Guard band: 23***

Baytown Sites

WNIZ658 – Location 3
- 3 x 3 MHz (240)
  - PDV Area–Wide: 200
  - PDV Site-Based: 46
  - Canceled Channels: 4
- Unassigned: 0
- Remaining Assignable: 10
- ***Assignable w/ Guard band: -20***

WNIZ658 – Location 2
- 3 x 3 MHz (240)
  - PDV Area–Wide: 200
  - PDV Site-Based: 46
  - Canceled Channels: 4
- Unassigned: 0
- Remaining Assignable*: 10*
- ***Assignable w/ Guard band: -20***

Sweeny Sites

WPDK390 – Location 1
- 3 x 3 MHz (240)
  - PDV Area-Wide: 200
  - PDV Site-Based: 11
  - Canceled Channels: 46
- Unassigned: 0
- Remaining Site-Based*:* 17
- ***Assignable w/ Guard band: -13***

WPDK390- Location 4
- 3 x 3 MHz (240)
  - PDV Area-Wide: 200
  - PDV Site-Based: 11
  - Canceled Channels: 42
- Unassigned: 0
- Remaining Site-Based: 13
- ***Assignable w/ Guard band: -17***

Houston Sites

WQUC564 – Location 1
- 3 x 3 MHz (240)
  - PDV Area–Wide: 200
  - PDV Site-Based: 14
  - Canceled Channels: 55
- Unassigned: 0
- Remaining Assignable: 29
- ***Assignable w/ Guard band: -1***

WQUC564 – Location 4
- 3 x 3 MHz (240)
  - PDV Area-Wide: 200
  - PDV Site-Based: 13
  - Canceled Channels: 55
- Unassigned: 0
- Remaining Assignable*: 68*
- ***Assignable w/ Guard band: -2***

[3]All AAR licenses are counted though not licensed at fixed sites. The frequencies associated with "Not Fixed Sites" are those not licensed as fixed base station/repeater locations. Conservatively, we assume these channels will be included in relocation plans.

WQUC564 – Location 5

- 3 x 3 MHz (240)
  - PDV Area-Wide: 200
  - PDV Site-Based: 15
  - Canceled Channels: 55
- Unassigned: 0
- Remaining Site-Based: 30
- ***Assignable w/ Guard band: 0***

Texas City Site

WQQQ235 – Location 1

- 3 x 3 MHz (240)
  - PDV Area-Wide: 200
  - PDV Site-Based: 19
  - Canceled Channels: 29
- Unassigned: 0
- Remaining Site-Based: 8
- ***Assignable w/ Guard band: -22***

KEY PHILLIPS 66 AND PHILLIPS 66 PARTNERS U.S. ASSETS AND OPERATIONS

Ferndale Refinery
FERNDALE RAIL TERMINAL*
RENTON
TACOMA (MT)
MOSES LAKE
SPOKANE
Yellowstone
THOMPSON FALLS RAIL TERMINAL
PORTLAND (MT)
MISSOULA RAIL TERMINAL
MISSOULA
GREAT FALLS
HELENA
BOZEMAN
CUTBANK
Glacier*
ROUNDUP
Billings Refinery
Beartooth
Bighorn
Seminoe
SHERIDAN*
CASPER*
ROCK SPRINGS
Pioneer
NORTH SALT LAKE
Rockies Express
DENVER
Powder River
LA JUNTA
Borger To Denver
Southern Hills*
Gold*
Blue
Chisholm
MEDFORD*
Line O
Stack
Shelly-Belvieu
ALBUQUERQUE*
ATA*
AMARILLO*
BORGER
Borger Refinery
SAAL*
WA Line*
Line 80
WICHITA FALLS*
LUBBOCK*
North Texas Crude*
West Texas Crude Gathering*
ODESSA*
EZ
South Texas Crude Gathering*
Sand Hills*
Sweeny Refinery
PALERMO TERMINAL*
PALERMO RAIL TERMINAL*
KEENE CDP*
Sacagawea*
Bakken Pipeline
DES MOINES
LINCOLN
KANSAS CITY*
JEFFERSON CITY*
Heartland
Conway
WICHITA N.*
Cherokee North
Standish*
Explorer*
MOUNT VERNON*
Cherokee East
Ponca City Refinery
GLENPOOL*
Cushing Cherokee South*
OKLAHOMA CITY TERMINAL*
Lake Charles Refinery
River Parish*
Alliance Refinery
HARTFORD (MT)*
E. ST. LOUIS*
Wood River Refinery
Bayway Refinery
LINDEN*
BAYWAY RAIL TERM.*
TREMLEY PT. (MT)*
Harbor*
SACRAMENTO
RICHMOND (MT)
San Francisco Refinery
Line 200
Line 400
Line 300
Line 100
JUNCTION TERMINAL
TORRANCE
LOS ANGELES
COLTON
Los Angeles Refinery

GULF COAST

Lake Charles Refinery
LAKE CHARLES COKE HANDLING
RIVER PARISH PIPELINE*
WESTLAKE
LOUISIANA CRUDE GATHERING
BAYOU BRIDGE*
CLIFTON RIDGE (MT)*
PECAN GROVE (MT)*
GCF
PASADENA*
Sweeny Refinery
BAYOU BRIDGE*
BEAUMONT (MT)
Alliance Refinery
FREEPORT (MT)
CLEMENS CAVERNS*
SWEENY FRACTIONATOR*

- Refinery
- Rail Terminal
- Fractionator
- Lubricants Plant
- Products Terminal
- Crude Terminal
- LPG Terminal
- Coke Terminal
- Underground Storage
- MT Marine Terminal
- GCF Gulf Coast Fractionator

Operated Pipelines
- Products Pipelines
- Crude Pipelines
- NGL/LPG Pipelines
- NGL/LPG Pipeline (CPChem owned)
- Idle Pipelines

Jointly Owned or Non-Operated Pipelines
- Products Pipelines
- Crude Pipelines
- Natural Gas Pipelines
- NGL/LPG Pipelines
- * Phillips 66 Partners Asset

Shale Basins